

LIATRIS

1. Common name(s): Blazing Star; Gayfeather; colic root (used as an intestinal antispasmodic), and bottlebrush.
2. Scientific name: Most common is *Liatris Spicata*. The genus *Liatris* contains approximately 30 species in almost every US state east of the Rock Mountains, as well as Canada and Northern Mexico.
3. Cold hardiness: Zone 3
4. Heat hardiness: Zone 9
5. Life cycle of plant in this region: Perennial.
6. Habit of plant: Herbaceous. It is from the Asteraceae family.
7. Describe the leaf arrangement: The leaves have a rough texture from short stiff hairs. The leaf attachment is alternate, but may be crowded on the stem so may appear whorled.
8. What are the cultural/environmental requirements of this plant? *Liatris* grows best in full sun and well drained soils, however *liatris* will tolerate some shade. Once established *liatris* are fairly drought resistant. Fertilize in early spring before new growth begins. *Liatris* can grow 1 to 4 feet.
9. List three insect pests of this plant. Describe signs and symptoms of each and how would you manage utilizing IPM approach? *Liatris* does not have any significant insect problems other than flea beetles in some locations. Most flea beetles affect vegetables, but some invade flowers. One way to monitor flea

beetles is to use yellow sticky traps. One IPM approach is weed control around planting sites which will deprive flea beetle larvae of food sources needed. Also, remove old crop debris and trash to deprive the overwintering. There are several insecticides for treating flea beetles as well such as malathion, permethrin, etc. Also, I found one biological IPM which is a braconid wasp which kills the adult flea beetle and can sterilize the larval in the female flea beetle while developing in her body.

10. List three disease pests of this plant. Describe signs and symptoms of each and how would you manage utilizing an IPM approach? Disease pests are leaf spots, rusts, and powdery mildew. In order to utilize an IPM approach, spacing plants would allow for sufficient sunlight and air circulation will help minimize disease problems.

11. List one abiotic problem of this plant. One abiotic problem is lack of snow cover causing the plant to freeze out in the winter. This can be prevented by mulching in the fall.

12. Describe the best method for propagating this plant. Liatris can arise from corms, rhizomes and elongated root/crowns. The corms, rhizomes and elongated roots/crowns should be planted in early spring and usually bloom in the first year. Liatris can also be grown from seeds. Germination can be improved if seeds are exposed to four to six weeks of cold, moist conditions. This can be done by planting seeds outdoors in the fall or early winter. Best to seed in the fall after the first frost. Liatris will not generally bloom in the first year if grown by seeds.

13. Can this plant be used as a phenological indicator? This plant is not used as a phenological indicator.

14. List up to 5 noteworthy cultivars, varieties, or hybrids. Note any special attributes of characteristics, if applicable (i.e. disease

resistance, insect resistance, color, dwarfing, etc.). Four common cultivars found in Wisconsin are *Liatris Aspera*; *Liatris Spicata*; *Liatris Floristan*; and *Liatris ligulistylis*. *Liatris spicata* is the most common and is excellent for attracting pollinators and beneficial insects. *Liatris* is unusual in that the flowers bloom from the bottom up and each bloom is from an individual node.

It is considered deer resistant and it was used by the Native Americans for medicinal purposes such as a diuretic and stimulant. In addition to these uses, the Cherokee used the plant as an analgesic for pain in the back and limbs and the Menominee used it for a "weak heart." The root of the plant is the part most often used. Native Americans also used the plant to treat swelling, abdominal pain and spasms/colic, and snake bites.